What is claimed is:

1. A method of duplex printing in which a media substrate is partially expelled from an image forming device, said method comprising:

transferring print material to a first side of one media substrate after a preceding media substrate has been partially expelled from said image forming device and moved into a duplex path of said image forming device; and

varying gaps between said media substrates as said media substrates are moved through said image forming device.

2. The method of claim 1, further comprising:

transferring print material to a first side of said preceding media substrate prior to said preceding media substrate being partially expelled from said image forming device and moved into said duplex path of said image forming device; and

transferring print material to a second side of said preceding media substrate;

wherein varying gaps between said media substrates as said media substrates are moved through said image forming device comprises varying a first gap and a second gap between said media substrates, said first gap being a distance between a trailing edge of said preceding media substrate and a leading edge said one media substrate and said second gap being a distance between a trailing end of one media substrate and a new leading edge of said preceding media substrate after inversion.

3. The method of claim 1, further comprising moving the media substrate in a vertical direction after transferring print material to the first side.

4. The method of claim 2, wherein said second gap is greater than said first gap.

5. The method of claim 2, wherein said second gap is substantially equal to said first gap.

6. The method of claim 2, further comprising:

partially expelling said one media substrate from said image forming device and moving it into said duplex path;

transferring print material to a second side of said one media substrate;

wherein varying gaps between said media substrates as said media substrates are moved through said image forming device comprises varying said first gap, said second gap and a third gap between said media substrates, said third gap being a distance between a new trailing edge of said preceding media substrate after inversion and a new leading edge said one media substrate.

7. The method of claim 6, wherein said third gap is smaller than said first gap.

8. The method of claim 6, wherein said third gap is the distance needed for toner patch sensing.

9. The method of claim 6, wherein said second gap is substantially equal to said first gap and said third gap is smaller than said first gap.

10. The method of claim 6, further comprising:

transferring print material to a first side of yet another media substrate;

wherein varying gaps between said media substrates as said media substrates are moved through said image forming device comprises varying said first gap, said second gap, said third gap and a fourth gap between said media substrates, said fourth gap being a distance between a new trailing edge of said one media substrate and a leading edge said yet another media substrate.

11. The method of claim 10, wherein said fourth gap is the distance needed for toner patch sensing.

12. The method of claim 10, further comprising switching a transfer voltage of said image forming device from a two-sided sheet voltage to a one-sided sheet voltage, wherein said fourth gap is proportional to the time to switch said transfer voltage.

13. The method of claim 6, wherein said third gap is the distance needed for sensing the edges of the media sheets.

14. The method of claim 10, wherein said fourth gap is the distance needed for sensing the edges of the media sheets.

15. The method of claim 1, wherein the method comprises a two-image print job.

16. The method of claim 1, wherein the method comprises a three-image print job.

17. A method of duplex printing using an image forming device, said method comprising:

transferring print material to a first side of a first media substrate;

partially expelling said first media substrate out of said image forming device and into a duplex path of said image forming device; and

transferring print material to a first side of a second media substrate while said first media substrate is into said duplex path.

18. The method of claim 17, further comprising varying an interpage gap between said media substrates as said media substrates are moved through said image forming device.

19. A method of transferring ordered images to respective sides of a first media substrate and a second media substrate in a duplex image forming device in which said media substrates are partially expelled from an image forming device, said order of images comprising a first image, a second image, a third image and a fourth image, said method comprising:

transferring said second image to a first side of said first media substrate;

transferring said fourth image to a first side of said second media substrate;

transferring said first image to a second side of said first media substrate; and

transferring said third image to a second side of said second media substrate;

wherein a first interpage gap extends between the second image and the fourth image, a second interpage gap extends between the fourth image and the first image, and a third interpage gap extends between the first image and the third image, with each of the interpage gaps being different.

20. A method of a transferring print material on each side of a plurality of media substrates using a duplex image forming device, said method comprising:

varying gaps between said media substrates as said media substrates are moved through said image forming device.

21. The method of claim 20, further comprising partially expelling said media substrates from said duplex image forming device.

22. The method of claim 21, wherein varying gaps between said media substrates as said media substrates are moved through said image forming device comprises varying a first gap and a second gap between a first media substrate and a second media substrate, said first gap being a distance between a trailing edge of said first media substrate and a leading edge of said second media substrate and said second gap being a distance between a trailing end of said second media substrate and a new leading edge of said first media substrate.

23. The method of claim 22, wherein said second gap is greater than said first gap.

24. The method of claim 22, wherein said second gap is substantially equal to said first gap.

25. The method of claim 22, wherein varying gaps between said media substrates as said media substrates are moved through said image forming device comprises varying said first gap, said second gap and a third gap between said first and second media substrates, said third gap being a distance between a new trailing edge of said first media substrate and a new leading edge said second media substrate.

26. The method of claim 25, wherein said third gap is smaller than said first gap.

27. The method of claim 25, wherein said third gap is the distance needed for toner patch sensing.

28. The method of claim 25, wherein said third gap is the distance needed for sensing the media sheets.

29. The method of claim 25, wherein said second gap is substantially equal to said first gap and said third gap is smaller than said first gap.

30. The method of claim 25, wherein varying gaps between said media substrates as said media substrates are moved through said image forming device comprises varying said first gap, said second gap, said third gap and a fourth gap between said second media substrate and a third media substrate, said fourth gap being a distance between a new trailing edge of said second media substrate and a leading edge said third media substrate.

31. The method of claim 30, wherein said fourth gap is the distance needed for toner patch sensing.

32. The method of claim 30, wherein said fourth gap is the distance needed to detect the sheets.

33. The method of claim 30, further comprising switching a transfer voltage of said image forming device from a two-sided sheet voltage to a one-sided sheet voltage, wherein said fourth gap is proportional to the time to switch said transfer voltage.

34. The method of claim 20, wherein the method comprises a two image sequence with two of said media substrates being within the image forming device at a time.

35. The method of claim 20, wherein the method comprises a three image sequence with three of said media substrates being within the image forming device at a time.

36. A method of duplex printing a plurality of media substrates using an image forming device, said method comprising:

moving a first media substrate to an image forming unit of said image forming device;

transferring print material to a first side of said first media substrate;

moving said first media substrate partially out of said image forming device and into a duplex path and moving a second media substrate to said image forming unit;

transferring print material to a first side of said second media substrate;

moving said second media substrate partially out of said image forming device and into said duplex path and moving said first media substrate from said duplex path to said image forming unit;

transferring print material to a second side of said first media substrate;

moving said first media substrate out of said image forming device and moving said second media substrate from said duplex path to said image forming unit;

transferring print material to a second side of said second media substrate;

moving said second media substrate out of said image forming device; and

varying gaps between said first and second media substrates as said media substrates are moved through said image forming device.

37. A duplex image forming device comprising:

a plurality of image forming units disposed along a primary media path and transferring print material to a media substrate;

a duplexer returning said media substrate to said primary media path; and

a processor controlling said image forming device;

wherein said processor is programmed to vary gaps between media substrates as said media substrates are moved through said primary path and said duplexer of said image forming device.

38. The duplex image forming device of claim 37, wherein said processor is further programmed to partially expel said media substrates from said image forming device.

39. The duplex image forming device of claim 37, wherein said processor is programmed for a two image printing sequence.

40. The duplex image forming device of claim 37, wherein said processor is programmed for a three image printing sequence.

41. A duplex image forming device comprising:

a plurality of image forming units disposed along a primary media path and transferring print material to a media substrate;

a duplexer returning said media substrate to said primary media path; and

a processor controlling said image forming device;

wherein said processor is programmed to cause:

a first media substrate to be partially ejected from said image forming device after print material is transferred to a first side of said first media substrate;

said first media substrate to be moved through said duplexer;

print material to be transferred to a first side of a second media substrate while said first media substrate moves through said duplexer.

42. The duplex image forming device of claim 41, wherein said processor is further programmed to vary gaps between said first and second media substrates as said media substrates are moved through said primary path and said duplexer of said image forming device.

43. The duplex image forming device of claim 41, wherein said processor is programmed for a two image print job.

44. The duplex image forming device of claim 41, wherein said processor is programmed for a three image print job.